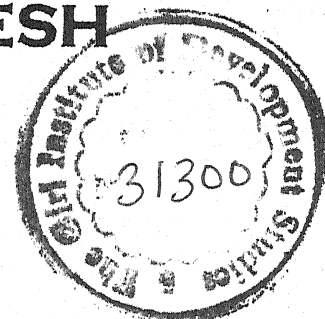


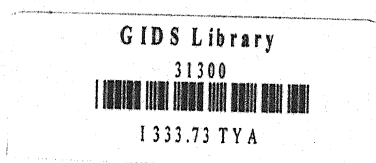
188

**AN EVALUATION OF INTEGRATED  
WASTELAND DEVELOPMENT  
PROJECT AGRA - II  
DISTRICT AGRA  
UTTAR PRADESH**



*Sponsored by:*

**MINISTRY OF RURAL DEVELOPMENT  
GOVERNMENT OF INDIA**



*Conducted by:*

**DR. R.C. TYAGI**

**GIRI INSTITUTE OF DEVELOPMENT STUDIES  
SECTOR O, ALIGANJ HOUSING SCHEME  
LUCKNOW 226 024**

2002

I.  
333.73  
TYA

# PREFACE

Watershed is a physical, economic and social system, which has a wide-ranging effect on the lives of the people and Watershed Management is a multi-pronged approach for the overall development of rainfed areas. Every piece of land is a part of some watershed and people and land are the focal points for all the watershed activities. People and nature are both part of a whole. The degradation of environment is basically attributed to the increasing biotic pressure on the fragile eco-systems in the absence of adequate investment and appropriate management practices to augment and conserve the natural resources. If a crisis has developed, it is on account of a distortion that had crept into the inter-relationship between man and nature. The sustained productivity of food, fuel, fodder, fibre, fruit and timber can be ensured by judicious and effective management of soil, water and vegetation. Now-a-days Watershed Management is coming up as an integrated approach for overall development of an area, in terms of socio-political and economic development.

The Ministry of Rural Development, Department of Land Resources, sponsored this mid-term evaluation study for District Agra-II to be conducted by the author at the Giri Institute of Development Studies, Lucknow. I do have an opportunity to express my gratitude to Mr. Halim Khan, Secretary, Department of Integrated Wasteland Development and Water Resources, Lucknow for providing us the opportunity to conduct this evaluation. I am also thankful to Mr. R.S. Pande, Addl. Director, Department of Integrated Wasteland Development, Lucknow, for extending necessary support during the study. Mr. Pande has been very helpful to me as he spared his valuable time to discuss various issues related with the study despite his busy work schedule, as and when I approached to him. I am obliged to the officials of the Department of Ram Ganga Command Pariyojana, Agra-II working in the capacity of Project Implementation Agency (PIA) at Agra, particularly to Mr. J.P. Shrivastava, BSA, for extending necessary cooperation during the field survey and study period.

I express my profound obligation and gratitude to Prof. G.P. Mishra, Director, Giri Institute of Development Studies, Lucknow, who not only encouraged me to work on this evaluation study but also spared his valuable time to guide me despite his busy schedule. Prof. Mishra has always been a source of academic inspiration to me and in completion of this evaluation study, his contribution has been too vital to be expressed in just few words.

I am also thankful to Mr. Manoharan, K. for word processing the manuscript carefully and efficiently. My thanks are due to Mr. R.S. Bisht for maintaining official records and to Mr. Deepak Sharma for providing his valuable time for footnoting of the photographs.

DR. R.C. TYAGI

Giri Institute of Development Studies  
Lucknow  
August, 2002



# CONTENTS

	<u>Page No.</u>
PREFACE	i
1. INTRODUCTION	1
2. METHODOLOGY	4
3. PROJECT PROFILE	5
4. MAIN PROBLEMS OF SELECTED WATERSHED	8
5. OBJECTIVES OF THE PROJECT	9
6. STRUCTURE OF ORGANIZATION	11
7(A). WATERSHED DEVELOPMENT TEAM (WDT)	12
7(B). WATERSHED DEVELOPMENT TEAM (WDT) ACCOUNT	13
8. DISTRICT WATERSHED ADVISORY COMMITTEE	14
9(A). WATERSHED COMMITTEE & ASSOCIATION	15
9(B). WATERSHED COMMITTEE & ASSOCIATION ACCOUNTS	17
10. WATERSHED DEVELOPMENT FUND ACCOUNT	20
11. USERS AND SELF-HELP GROUPS	20
12. ROLE OF WOMEN IN THE PROJECT	27
13. DETAILS OF COMMUNITY ORGANIZATION WORK	29
14. TRAINING, EXTENSION AND PUBLICITY	35
15. NURSERY AND PLANTATION WORK	36
16. SUSTAINABLE DEVELOPMENT OF THE AREA AND PERFORMANCE OF PIA	41
17. PHYSICAL AND FINANCIAL ACHIEVEMENTS	46
18. UTILIZATION OF FUND AND MAINTENANCE OF RECORDS	48
19. OVERALL IMPACT ASSESSMENT, RECOMMENDATIONS	49

# **AN EVALUATION OF INTEGRATED WASTELAND DEVELOPMENT PROJECT : AGRA-II, DISTRICT AGRA, UTTAR PRADESH**

## **1. INTRODUCTION**

The watershed is a topographically delineated area that is drained by a stream system. The watershed is a manageable hydrological unit that makes a harmonious use of the prevailing climate, soil, water, locally available material and human resources towards stepping up crop yields. The watershed approach provides the ideal means for Integrated Wasteland Development Programme. It involves the exploration and development of the complex inter-relationship between the watershed resources and population of the region and has opened up new vistas in agricultural development and helped in improving and stabilizing crop production. Watershed is a physical, economic and social system, which has a wide-ranging effect on the lives of the people. Every piece of land is a part of some watershed and people and land are the focal points for all the watershed activities. So, people and nature are both part of a whole.

Integrated Watershed Management is the process of formulating and implementing a course of action involving natural and human resources in a watershed, taking into account the social, political, economical and institutional factors operating within the watershed and the surrounding river basin and other relevant regions to

*GIDS, Lucknow*

achieve specific social objectives. Typically this process would include : (i) establishing watershed management objectives, (ii) formulating and evaluating alternative resource management actions involving various implementations, tools and institutional arrangements, (iii) choosing and implementing a preferred course of action, and (iv) thorough monitoring of activities and outcomes, evaluating performance in terms of degree of achievement of the specified objectives.

The Watershed Approach is the application of Integrated Watershed Management in the planning and implementation of resource management and rural development projects or as part of planning for specific resource sectors such as agricultural, forestry or mining. Imbedded in this approach is the linkage between uplands and lowlands in both biophysical and socio-economic contexts. The degradation of environment is basically attributed to the increasing biotic pressure on the fragile eco-systems in the absence of adequate investment and appropriate management practices to augment and conserve the natural resources.

The sustained productivity of food, fuel, fodder, fibre, fruit and timber can be ensured by judicious and effective management of soil, water and vegetation. More recent watershed management is coming up as an integrated approach for overall development of an area, in terms of socio-political and economic development. Watershed management must explicitly recognize the range of physical, social, economic and political factors that result in the observed patterns of use. Different developmental agencies, viz. Governmental, Non-Governmental and Private are involved

in the planning, execution, monitoring and evaluation of watershed activities in a vast acreage of land.

In the light of the above statements, District Rural Development Agency (DRDA), Agra, prepared and submitted a Project Proposal to Government of India, Ministry of Rural Development, Department of Land Resources, in the year 1999 for the financial assistance. This Integrated Wasteland Development Project for Agra was sanctioned in the year 1999-2000. The proposal was approved for the implementation of Integrated Wasteland Development for Watershed Development Programme in District Agra, Block Sainya of Uttar Pradesh, at a total cost of Rs.2,74,80,000/- (Rupees Two crores Seventy-Four lakhs and Eighty thousand only) for the treatment of the total area of 6870 hectare.

For the execution of the project, in first phase, an amount of Rs.123.11 lakh had been sanctioned in three instalments. The first instalment of Rs.41,22,000/- (Rupees Forty One Lakh Twenty Two thousand only) was cleared on 2<sup>nd</sup> December 1999 to the District Rural Development Agency (DRDA), Agra. The second instalment of Rs.27,48,000/- (Rupees Twenty Seven Lakh Forty Eight Thousand only) was cleared on 21<sup>st</sup> December 2000 to DRDA. Third instalment of Rs.54,41,000/- (Rupees Fifty Four Lakh Forty One Thousand only) was cleared on 7<sup>th</sup> June 2001 to DRDA, Agra, towards the expenditure required for the work execution. These instalments were sanctioned and released along with certain norms and directive laid by Ministry of Rural Development, Government of India. It has been informed that due to certain reasons and procedural delay, DRDA had released this amount to PIA a bit late.

*GIDS, Lucknow*

After the completion of first phase of the project period 1999-2000 to 2001-2002, Government realized to make a mid-term evaluation for the work executed during the period and expenditure had been made. The Gird Institute of Development Studies, Lucknow has been selected by the Department of Land Development and Water Resource, Ministry of Rural Development, Government of Uttar Pradesh, for conducting an evaluation of executed work and scheme of the project in District Agra.

## 2. METHODOLOGY

The evaluation report of the Integrated Wasteland Development Project for District Agra has been prepared mainly on the basis of intensive field survey and on the basis of documents and information gathered from the Project Implementing Agency (PIA) and District Rural Development Agency (DRDA), Agra. A deep enquiry has been made by the evaluator. regarding the Watershed Development Team (WDT), Watershed Association (WA), Community Organization, Users Group, Self-Help Groups, Women Groups and their participation in the execution of project work. The selections of villages were made randomly and have been checked thoroughly. Some of the Check Dams (CD), Peripheral Bund (PB), Lateral Bunds (LB), Ponds, Hand Pumps were checked carefully at the concerning watersheds and villages, which were executed by the Project Implementing Agency (PIA) in the project.

The vital photographs of the Check Dams (CD), Peripheral Bund (PB)/ Marginal Bund (MB), Lateral Bunds (LB), Ponds, Check roads and other completed work from the works fund and Community Development Fund, were taken and placed in this report.

*GIDS, Lucknow*



The evaluator personally met with the President, Treasurer and other members of the Self-Help Groups (SHG) at the concerning villages and enquired about the progress of the Groups and checked their accounts, passbooks and proceeding registers. We also met with Pradhans and Farmers of the concerning villages and watersheds and enquired about the progress and impact of the project in their area. All the relevant information and documents regarding the execution of Watershed Development work have been gathered from Bhoomi Sanrakshan Adhikaris (BSA) Mr. J.P. Srivastava and his Unit of the District Agra. All other official information regarding the receive of instalments and expenditure accounts were compiled by the three Junior Engineers associated in this Project at BSA Office, Agra. A meeting, with Dr. Ashok Kumar, Commissioner & Administrator, Agra, Mr. Mahesh Chandra Yadav, Project Director, Agra and Mr. Shankar Deen, Deputy Director, was also held in connection with the performance and progress of the Integrated Wasteland Development Project of the District Agra.

### 3. PROJECT PROFILE

Wasteland means degraded land, which is producing below its full productive capacity and which can be improved through a reasonable investment (Ministry of Rural Development, Government of India, 1994). The land, which is deteriorating for lack of appropriate water and soil management or on account of natural, causes. In District Agra, the wastelands have been selected on the basis of watersheds. A, survey team held detailed discussions with the Watershed Associations, Watershed Committees to

identify the need of each village/watershed with regard to fodder, fuel, timber as well as measures required to be taken to conserve soil, moisture and natural resources.

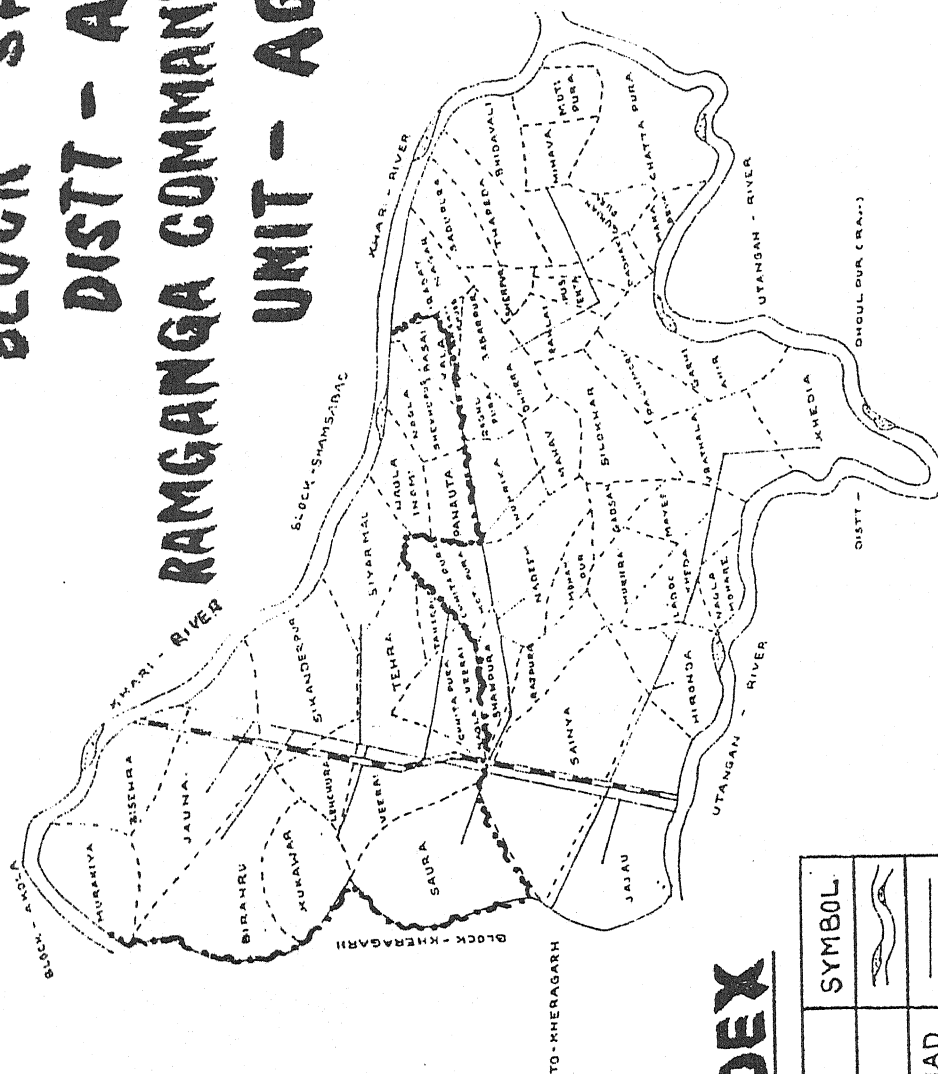
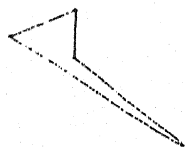
To develop the wasteland on watershed basis, an Integrated Wasteland Development Project for District Agra had been prepared by DRDA for the financial support from the Department of Land Resources, Ministry of Rural Development, Government of India. The wasteland of District Agra, which have been taken and improving by application of scientific, technological and other sources so as to provide economically and ecologically viable vegetative cover on watershed basis. Therefore, watershed has been taken as the basic unit for planning, conservation of soil and water, regeneration of vegetal cover.

Major portion of the Sainya Block of District Agra comes under the catchment of Khari River, which finally falls in Yamuna River along with tributaries. It lies between latitude 26°55' and 27°10' North and longitude 77°45' to 78°. The topography of the selected area for the treatment is having waterstress and undulating. The rainfall is about 680 mm annually. Rainfall in this district generally found very erratic type of. The area is very sloppy and slope of area varies from village to village. The major area is affected by soil degradation/erosion problem. The area is well drained in upper reaches, but in lower reaches shallow deep ravines have been formed. The temperature of the area reaches upto 50° centigrade in the months May and June, while it reaches about 2.5° centigrade in the month of January. The climate of the district is dry (drought prone) with constant water stress (See in Map).

*GIDS, Lucknow*

# MAP OF BLOCK - SAINYA DISTT - AGRA RAMGANGA COMMAND PROJECT UNIT - AGRA

NORTH



## INDEX

S.N.	ITEMS	SYMBOL
(1)	RIVER	
(2)	PUCCA ROAD	
(3)	VILLAGE-BOUNDARY	
(4)	RAILWAY LINE	
(5)	PROJECT-BOUNDARY	
(6)	PROJECT-AREA	6870 Ha.

The texture of the soil varies from loamy sand to sandy loam. The loamy sand covers an area of 3611.90 hectare and sandy loam cover an area of 3653.64 hectare of Sainya Block in Agra District. Slope of area varies from 0.5 to 10 per cent. Depth of the soil varies from 0.5 metre to more than 12 metres and permeability of the soil varies from moderate to very high in Sainya Block. Depth of ground water level varies from 15 metres to 35 metres in different seasons. Recharge of dry-out well is poor. Average annually rainfall received 680mm. Out of this 70 per cent of rain water flows as run-off towards rivers carrying with fertile soil, due to slope terrain, on an average of 13 metric tonne per hectare per year fertile soil is lost. This has resulted in continuous decrease in the productivity. Due to continuous pumping out ground water, aquifer levels are falling at an average rate of 0.30 metre per year.

#### 4. MAIN PROBLEMS OF SELECTED WATERSHED

Due to mis-management of natural resources, like soil, water and vegetation, top soil has been washed away and formation of shallow ravines are under process. At present depth of soil is less than 1.5 metre, slope percentage ranges from 0.5 metre to 6 metre or more. Around 65 per cent area of this Block in this district suffers from land degradation. The rolling and undulating topography with higher slopes have resulted in severe erosion and siltation in reservoirs. Due to land degradation, ecology of area has been disturbed. The major problems of the selected block and watershed are (a) lack of awareness amongst the villagers about the deteriorating environmental conditions of the area, (b) 70 per cent of the run off water makes it away towards nalas

and river, carrying with it fertile soil, rich in nutrients, (c) due to steep slope and absence of vegetation canopy, the low rate of infiltration in the soil profile, (d) due to erratic rain, productivity of crops fluctuates from year to year – two droughts are there in every 5 years, (e) due to over-grazing vegetation cover is declining on community land, (f) availability of water for human and animal is less than the demand, specially, in the summer months, (g) continuous cutting of trees, overgrazing of grass and bushes and shrubs, the ecological balance of the area has been badly disturbed, (h) poor livestock with low milk yield and draught system causing great harm to the scanty vegetation available in the wasteland area, and (i) the trend of migration from villages to city by educated youths in search of jobs, results in the continuous of ignorance in the development of villages with special reference to wasteland areas.

## 5. OBJECTIVES OF THE PROJECT

Watershed proposal had been prepared on the basis of guidelines provided from Wasteland Development Board, Ministry of Rural Area and Employment, Government of India. The main aim of this Watershed Management Project is to achieve following objectives in Sainya Block of District Agra:

- (1) To conserve natural land resources for sustained agricultural production.
- (2) Optimum utilization of the watersheds natural resources like, land, water, vegetation, etc. that will mitigate adverse effects of drought and prevent further ecological degradation.
- (3) Employment generation and development of the human and other economic resources of the village in order to promote income generation activity.
- (4) Restoration of ecological balance in the village falling in watershed areas.
- (5) More suitable distribution of the benefits of land and water resources.



- (6) To reduce surface runoff and losses of fertile soil masses due to erosion.
- (7) To recharge ground water and recycle of rain water.
- (8) To utilize the land according to its' capability to produce grain, fruits, timber, grasses and medicinal plants.

The project proposal covering an area of 6870 hectares, with cost norm of total Rs.274.80 lakh. The total number of watersheds selected under the Integrated Wasteland Development Project were 19. On an average, the area of Watershed is ranging from 84 hectares (in Panauta village) to 607 hectares (in Murkiya village) (Table 1). Watershed-wise location and area to be treated is given in Table-1.

Table 1 : Watershed-wise Location and Area to be Treated in Block Salnya, District Agra

Sl. No.	Name of Village	Name of Watershed	Total Area (in ha.)	Misc. in Area (in ha.)	Area to be Treated (in ha.)
1	Murkiya	Y-48-6-m	623.64	16.00	607.00
2	Bisehra I	Y-48-6-L-1	405.35	24.35	380.00
3	Bisehra II	Y-48-6-L-2	400.00	20.00	380.00
4	Jaunai	Y-48-6-k	374.00	5.00	369.00
5	Birahru I	Y-48-6-j-1	440.30	25.00	415.00
6	Birahru II	Y-48-6-j-2	438.30	24.30	414.00
7	Sikanderpur	Y-48-6-h	490.50	50.00	440.00
8	Kukawar	Y-48-6-i	387.30	5.00	382.00
9	Siyarmau	Y-48-6-g	633.76	46.20	587.00
10	Lahechura	Y-48-6-b	203.56	23.56	180.00
11	Nagla Enami	Y-48-6-f	178.07	17.07	161.00
12	Saura	Y-48-6-d	575.48	19.48	556.00
13	Tehra I	Y-48-4-a-1	453.11	17.11	436.00
14	Tehra II	Y-48-4-a-2	400.00	6.00	394.00
15	Taharpur	Y-48-4-b	138.00	15.00	123.00
16	Panauta	Y-48-4-d	91.06	7.06	84.00
17	Basai Kalan	Y-48-4-e	164.71	22.71	142.00
18	Chhitpura I	Y-48-4-c-1	439.00	25.75	413.00
19	Chhitpura II	Y-48-4-c-2	432.00	24.84	407.00
Total			7268.14	378.60	6870.00

Source : B.S.A., Ram Ganga Command, Agra-II.

## 6. STRUCTURE OF ORGANIZATION

At the time of evaluation, in June 2002, the structure of Organization, working at DRDA level in Agra was found as Dr. Ashok Kumar (Commissioner & Administrator), Ram Ganga Command, Smt. Reeta Singh (Chief Development Officer), Mr. Mahesh Yadav (Project Director) and Mr. Shankar Deen (Deputy Director). The working structure at PIA level was found as Mr. J.P. Srivastava (BSA, Ram Ganga Command), Mr. Asadullah (Junior Engineer), Mr. Durgesh Puri (Junior Engineer) and Mr. Dhan Pal Singh (Junior Engineer). A meeting regarding the work progress and problems faced by the village level workers – Assistant Land Development Inspectors was organized by the evaluator on 3<sup>rd</sup> June 2002 at BSA Office, Agra. All the 13 ALD Inspectors, 3 Junior Engineers and BSA were present in the meeting. They showed their progress registers and narrated about the work performed by them in their watersheds. In the meeting an enquiry has also been made by evaluator regarding the formation and progress of Users Groups, Self-Help Groups and role of women in the execution of project work.

It has been found that the total area of Sainya Block of Agra District had been divided into three parts. Each part comprises of six watersheds/villages at its minimum. All these three parts were supervised by the three Junior Engineers under the guidance of BSA, Agra. A list of workers under the Integrated Wasteland Development Project is given in Table-2, which shows the placement of staff upto the watershed and village level.

Table 2 : A List of PIA Workers Under the IWDP, Block Sainya, District Agra

Sl. No.	Name of Village	Code Number of Watershed	Name of Asstt. Inspector in Project	Junior Engineer	BSA
1	Sikanderpur	Y-48-6-h	Shri Rameshwar P. Tyagi	Shri Durgesh Puri	Shri J.P. Srivastava
2	Bisehra I	Y-48-6-L-1	Shri Purshottam Pal		
3	Taharpur	Y-48-4-b			
4	Chhitpura I	Y-48-4-c-1	Shri Santosh Kumar		
5	Chhitpura II	Y-48-6-j-2			
6	Birahru I	Y-48-6-j-1	Shri Ram Veer Singh		
7	Basai Kalan	Y-48-4-e			
8	Bisehra II	Y-48-6-L-2	Shri Ram Pal Singh	Shri Dhan Pal Singh	
9	Tehra II	Y-48-4-a-2	Shri Surendra Kr. Sharma		
10	Birahru II	Y-48-6-j-2	Shri Dinesh Chandra Sharma		
11	Panauta	Y-48-4-d			
12	Nagla Enami	Y-48-6-f	Shri Gyan Prakash Sharma		
13	Lahchura	Y-48-6-b			
14	Tehra I	Y-48-4-a-1	Shri Vijendra Pal Singh	Mohd. Abdullah	
15	Jaunai	Y-48-6-k	Mohd. Islam		
16	Kukawar	Y-48-6-i			
17	Siyarmau	Y-48-6-g	Shri Prem Pal Sharma		
18	Murkiya	Y-48-6-m	Shri Birendra Pal Sharma		
19	Saura	Y-48-6-d	Shri Ram Narain		
Total			13	3	1

Source : B.S.A., Ram Ganga Command, Agra-II.

**7(a). WATERSHED DEVELOPMENT TEAM (WDT)**

Watershed Development Team (WDT) has been constituted in the District Agra under the Integrated Wasteland Development Project. There are 4 members in this team altogether. Shri J.P. Srivastava (BSA), Ram Ganga Command is the Team Leader and other three Dr.R.S. Verma (Reader), Ram Ganga Command, College of Agriculture, Agra, Shri Virendra Yadav, Senior Scientist and Shri Durgesh Puri (Junior Engineer), Ram

*GIDS, Lucknow*

Ganga Command are the members of this Watershed Development Team. It has been found that the members of Watershed Development Team are well educated and technically trained in watershed management work. It has also been informed and confirmed that all the 4 members of this team has been trained in watershed management work, by Regional Rural Development Institute (RRDI), a training centre, located at Bichpuri, Agra. They have attended two training programmes, conducted by watershed experts in this Institute. The details of members of Watershed Development Team has been given in Table-3.

Table 3 : Details of Members of WDT, District Agra

S.No.	Name and Post of the Members	Post in WDT	Department
1.	Shri J.P. Srivastava, BSA	Team Leader	Ram Ganga Command
2.	Dr. R.S. Verma, Reader	Member	RBS Agril. College
3.	Shri Virendra Yadav, Senior Scientist	Member	Ram Ganga Command
4.	Shri Durgesh Puri, Junior Engineer	Member	Ram Ganga Command

Source : Information from BSA Office, Ram Ganga Command, Agra-II.

#### **7(b). WATERSHED DEVELOPMENT TEAM (WDT) ACCOUNT**

Watershed Development Team's accounts have been opened in Agra District under the control of team leader – Bhoomi Saurakshan Adhikaris (BSA), Ram Ganga Command, Agra. It has been found that WDT account has been opened in Central Bank of India, Cantt. Area Branch with an amount of Rs.43,978 lakh and the balance amount

*GIDS, Lucknow*

was Rs.6.195 lakh on date 31.5.2002. In this way it has been found that an amount of Rs.37.783 lakh had been utilized for the purpose of Watershed Development Work by the team.

#### 8. DISTRICT WATERSHED ADVISORY COMMITTEE

District Watershed Advisory Committee has been constituted in the Integrated Wasteland Development Project in district Agra. This Committee is having thirteen members altogether. All these members are educated and well qualified in watershed development work. Chief Development Officer (CDO) and Project Director (PD) are working at DRDA level and are the President and Vice-President of the Committee respectively. All other eleven persons of this committee designated as Member. They are : (1) District Agricultural Officer, (2) District Animal Husbandry Development Officer, (3) Deputy Agriculture Director, Land Conservation Department, (4) Forest Officer, Departmental, (5) President Farmer Plantation Committee, (6) Dr. Ramji Lal, Scientist, RVS College, Agra, (7) Dr. Roshan Singh, Ex-Principal, RVS College, Agra, (8) Dr. V.S. Verma, RVS College, Agra, (9) Dr. S.S. Bhushan, Scientist, Central Land and Water Conservation Research Centre, Chalesar, Agra, (10) Land Conservation Officer, BSA, Ram Ganga Command Project, Agra, and (11) Land Conservation Officer, BSA, Tundla at Agra. BSA Tundla at Agra also denoted as Secretary in the Advisory Committee. A list of members of District Watershed Advisory Committee is shown in table-4.



**Table 4 : List of Members of District Watershed Development Advisory Committee, District Agra**

Sl. No.	Designation of the Officer	Post	Address
1.	Chief Development Officer	President	Vikas Bhawan, Agra
2.	Project Director, DRDA	Vice President	DRDA, Agra
3.	District Agriculture Officer	Member	Agra
4.	District Animal Husbandry Officer	Member	Agra
5.	Deputy Agriculture Director	Member	Agra Commissionery, Agra
6.	Forest Officer, Departmental	Member	Agra
7.	President of Farmer Plantation Committee	Member	Agra
8.	Dr. Ramji Lal (Scientist)	Member	RSV College, Agra
9.	Dr. Roshan Singh (Ex-Principal)	Member	RSV College, Agra
10.	Dr. V S Verma (Scientist)	Member	RVS College, Agra
11.	Dr. S.S. Bhushan (Scientist)	Member	Central Land & Water Conservation Research Centre, Agra
12.	Land Conservation Officer (BSA)	Member	Ram Ganga Command Project, Agra
13.	Land Conservation Officer (BSA)	Secretary	Tundla at Agra

Source : BSA Office, Agra (Ram Ganga Command).

#### **9(a). WATERSHED COMMITTEE & ASSOCIATION (WC/WA)**

Nineteen Watershed Committees (WC) have been constituted in Sainya Block of District Agra. All these Watershed Committees have been constituted according to Watershed norms laid by the Ministry of Rural Development, Government of India. Work has been started and in progress in all these nineteen watersheds. Every Watershed Committee has a President and a Secretary. The watershed-wise name of the villages, where committees have been formed are : (1) Murkiya, (2) Bisehra I, (3) Bisehra II, (4)

*GIDS, Lucknow*

Jaunai, (5) Birahru I, (6) Birahru II, (7) Sikanderpur, (8) Kukawar, (9) Siyarmau, (10) Lahchura, (11) Nagla Enami, (12) Saura, (13) Tehra I, (14) Tehra II, (15) Taharpur, (16) Panauta, (17) Basia Kalan, (18) Chhitpura I, and (19) Chhitpura II. It has also been found that fifteen Watershed Association (WA) have been formed and all the villagers of the concerning villages are the member of Watershed Association (WA) in Block Sainya of District Agra and out of these members, one person has been elected as President of the Watershed Association (WA). Every Watershed Committee has a President and a Secretary working with the concern of BSA, Ram Ganga Command, and taking active part in execution of the project work (Table-5).

**Table 5 : Code-wise Name of President and Secretary of Watershed Committee.**  
**District Agra**

Sl. No.	Name of Village	Name of Watershed	Name of President	Name of Secretary
1	Murkiya	Y-48-6-m	Smt. Lilavati	Shri Birendra Pal Sharma
2	Bisehra I	Y-48-6-L-1	Shri Gopal Singh	Shri Purshottam Pal
3	Bisehra II	Y-48-6-L-2	Shri Radhye Shyam	Shri Ram Pal Singh
4	Jaunai	Y-48-6-k	Shri Mool Chand	Mohd. Islam
5	Birahru I	Y-48-6-j-1	Shri Bachoo Singh	Shri Ram Veer Singh
6	Birahru II	Y-48-6-j-2	Shri Mahaveer Prasad	Shri Dinesh Chand
7	Sikanderpur	Y-48-6-h	Shri Bhagwati Prasad	Shri Rameshwar Prasad
8	Kukawar	Y-48-6-i	Smt. Shakuntala Devi	Mohd. Islam
9	Siyarmau	Y-48-6-g	Shri Devendra Singh	Shri Prem Pal Singh
10	Lahechura	Y-48-6-b	Smt. Prem Vati	Shri Gyan Prakash
11	Nagla Enami	Y-48-6-f	Shri Ram Prasad	Shri Gyan Prakash
12	Saura	Y-48-6-d	Shri Daya Shankar	Shri Ram Narayan
13	Tehra I	Y-48-4-a-1	Shri Raj Kumar Singh	Shri Vijendra Pal Singh
14	Tehra II	Y-48-4-a-2	Smt. Geeta Devi	Shri Surendra Kumar
15	Taharpur	Y-48-4-b	Shri Raj Kumar	Shri Purshottam Pal
16	Panauta	Y-48-4-d	Smt. Usha Devi	Shri Dinesh Chandra
17	Basai Kalan	Y-48-4-e	Shri Ram Prakash	Shri Santosh Kumar
18	Chhitpura I	Y-48-4-c-1	Shri Brakm Singh	Shri Santosh Kumar
19	Chhitpura II	Y-48-4-c-2	Smt. Savitri Devi	Shri Santosh Kumar

Source : B.S.A.Office, Agra-II.

It has been informed by the BSA and Junior Engineers of Ram Ganga Command that Watershed Committees and Watershed Associations are well trained in watershed development work. They were trained by well organized training programmes, conducted by Regional Rural Development Institute (RRDI), a training centre at Bichpuri, Agra. In recent past, a continuous training programme for all the members of Watershed Committee, was organized by RRDI, Bichpuri, Agra, starting with 29<sup>th</sup> January 2002 to 9<sup>th</sup> February 2002. The total number of trainings had been organized upto May 31<sup>st</sup>, 2002 were 99 and total number of beneficiaries were 6911. All beneficiaries were trained by the experts of watershed development work. The subject of trainings were – technical aspects of the project, enduring of project, regarding the benefits of Self-Help Group and Users Group and technical knowledge of agriculture production, etc.

#### **9(b). WATERSHED COMMITTEE & ASSOCIATION ACCOUNTS**

Watershed Committees' accounts have been opened, under the Integrated Wasteland Development Project, in District Agra. It has been informed by the BSA, Ram Ganga Command that each Watershed Committee has its own account. So nineteen accounts in total were opened, one account for each Watershed Committee, in Nationalized Bank, i.e. Central Bank of India, Cantt. Area Branch, Agra. It has been confirmed by the evaluator after checking the pass books of these accounts along with the accounts opened for Self-Help Groups in the Watershed Tehri-I and Sikanderpur (Photoplates 1&2). All these are the Saving Bank Accounts are opened in Nationalized Bank.



Plate: 1 Accounts of WC/WA & SHG were shown by President Mr. Kok Singh, Gram Pradhan Mr. Raj Kumar Singh, BSA Mr. J.P. Shrivastava to Evaluator Dr. R.C. Tyagi in village Tehra-I, Block Sainya Distt. Agra.

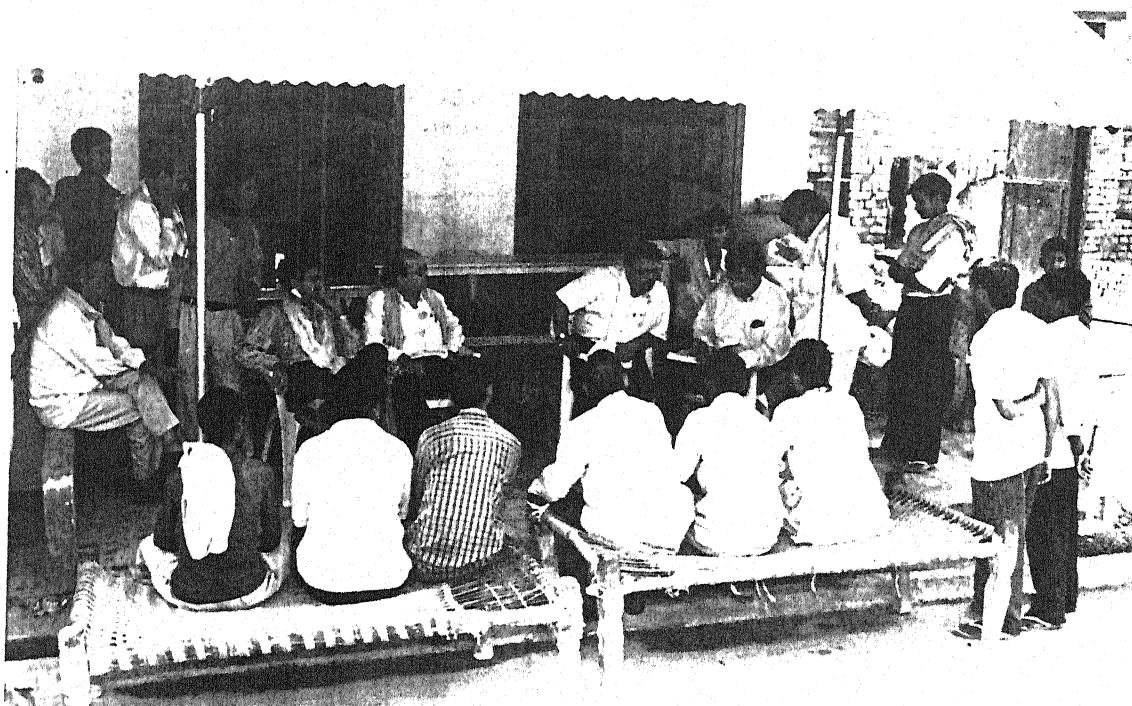


Plate: 2 Accounts of WC/WA & SHG were shown by the President Mr. Bhagwati Prasad & Secretary Mr. Ram Prakash to Evaluator at the Village Sikanderpur, Block Sainya, Distt. Agra.

*GIDS, Lucknow*

31300

It has been found that a sum of Rs.68.70 lakh have been released for the 19 WC/WA to open their savings bank accounts in the nationalized banks. Out of this amount a total amount of Rs.65.943 lakh have been utilized to execute project work and a total amount of Rs.2.757 lakh have been found as remaining amount in the accounts of WC/WA as on 31<sup>st</sup> May 2002. The particulars regarding the WC/WA accounts have been given in Table-6. The WC/WA are keeping accounting for the persons, those who are being engaged in execution of project work.

Table 6 : Particulars of WC/WA Accounts

(Upto 31.5.2002)

Sl.No.	Item	Unit	Quantity	Name of the Bank
1.	Number of WC	Number	19	Central Bank of India Cantt. Area Branch, Agra
2.	Number of Accounts	Number	19	
3.	Released into Account	Rs. in Lakh	68.70	
4.	Expenditure	Rs. in Lakh	65.943	
5.	Balance	Rs. in Lakh	2.757	

Source : B.S.A.Office, Agra-II.

Keeping in view, to generate employment at local level, maximum physical work of the project like – formation of Check Dams, Peripheral/Marginal Bunds, Lateral Bunds, Construction of Ponds and digging for the hand pumps, were executed by local people and landless labourers. This fact has been confirmed at the time of field survey, from the local people, farmers, Gram Pradhans of the concerning villages and watersheds and the members of Watershed Committees/Associations.



## 10. WATERSHED DEVELOPMENT FUND ACCOUNT

Under the Integrated Wasteland Development Project, Watershed Development Fund (WDF) accounts have been opened for 19 Watershed in Syndicate Bank, Sanjay Place, Agra with a total amount of Rs.3.806 lakh. According to the information provided by the BSA, Ram Ganga Command, Agra, that an interest of Rs.0.011 lakh have also been earned upto 31<sup>st</sup> May, 2002 and amount has been fixed in the same bank in Agra (Table 7).

Table 7 : Watershed Development Fund Account (Upto 31.5.2002)

1.	Number of WCF Account	19	Syndicate Bank, Sanjay Place, Agra
2.	Number of Watershed	19	
3.	Deposit (Rs. in lakh)	3.806	
4.	Interest on Fixed Deposit	0.011	

Source : B.S.A.Office, Ram Ganga Command, Agra-II.

This Watershed Development Fund will be utilized in the maintenance of assets on community land for common use after completion of project period. Works taken up for individual benefits shall not be eligible for repair or maintenance out of this fund.

## 11. USERS AND SELF-HELP GROUPS

Under the supervision of Project Implementing Agency (PIA), 1191 users' groups have been constituted in Agra District. The total number of users in these groups are found 6911. These watershed users groups have been constituted in the Watershed

area with the help of Watershed Development Team (WDT). All the members of these groups are having their land holding within the Watershed areas. A sum of Rs.3.806 lakh has been fixed in the Bank for a period of 4 years, for the repair and maintenance and other required and necessary work after the completion of the project.

It has been found that 20 Self-Help Groups have been constituted by Project Implementing Agency (PIA), with the help of Watershed Development Team (WDT) in the watershed areas of the district. Out of these SHGs, 17 SHGs were male and 3 were female. All these groups are found homogenous, having common identity, like, agricultural labourers, landless persons, women, shepherds, scheduled castes, etc. All the nineteen watersheds were having one SHG in them, in which Sikanderpur has two SHGs. The details of Self-Help Groups has been illustrated in Table 8.

Out of a total 20 SHGs, 7 SHGs namely (i) Pal SHG of Siyarmau Watershed, (ii) Yogi SHG of Sikandarpur SHG, (iii) Khan Hath Kargha SHG of Saura Watershed, (iv) Prajapati SHG of Birahru I, Watershed, (v) Krishna Dairy SHG of Tehra I Watershed, (vi) Dairy SHG of Panauta Watershed, and (vii) Kala Devi SHG of Sikanderpur Watershed, were thoroughly checked by making a field visit to them. All the records of these SHGs, i.e. meeting registers, Bank Accounts/Pass-Books, Members' Personal Pass Books (provided by BSA Office) and the record of loan taken by these SHGs from revolving fund, were checked carefully by evaluator (Photoplates 3 & 4).

Table 8 : Details of Self-Help Groups Under IWDP in Agra

(Upto 31.5.2002)

Sl. No.	Name of Village	Name of Self-Help Group	Total No. of Members	Loan Given from Revolving Fund	Remarks
1	Murkiya	Meena Tailoring, SHG	07	--	Tailoring
2	Bisehra I	Mohan Das, SHG	10	--	Goat Rearing
3	Bisehra II	Chetana, SHG	11	--	Goat Rearing
4	Jaunai	Kumhari Kala, SHG	11	10000	Earthen Pot
5	Birahru I	Prajapati, SHG	12	10000	Earthen Pot
6	Birahru II	Mangla, SHG	10	--	Dairy
7	Sikanderpur	Yogi, SHG	10	10000	Dairy
8	Kukawar	Lodhi Rajpur, SHG	10	--	Tailoring
9	Siyarmau	Pal, SHG	14	10000	Goat Rearing
10	Lahechura	Mangla, SHG	12	10000	Dairy
11	Nagla Enami	Vikas, SHG	12	--	Dairy
12	Saura	Khan Hathkargha, SHG	10	20000	Hat Kargha
13	Tehra I	Krishna Dairy, SHG	10	10000	Dairy
14	Tehra II	Bajrangi, SHG	10	--	Dairy
15	Taharpur	Bhola Shankar, SHG	10	--	Subji Utpadan
16	Panauta	Dairy, SHG	10	10000	Dairy
17	Basai Kalan	Jai Maa Kali, SHG	10	--	Dairy
18	Chhitpura I	Manav Uttan, SHG	10	--	Dairy
19	Chhitpura II	Dairy, SHG	10	--	Dairy
	Sikanderpur	Kela Devi, SHG	10	--	Dairy
	<b>TOTAL</b>	<b>20</b>	<b>209</b>	<b>90000</b>	<b>--</b>

Source : B.S.A.Office, Ram Ganga Command Project, Agra-II.



Plate: 3 President of Prajapati SHG, Showing meeting register, Pass Books to evaluator Dr. R.C. Tyagi.



Plate: 4 President Mr. Bhagwati Prasad and Secretary Mr. Ram Prakash of Yogi SHG Showing Accounts, Pass Books and Meeting register to evaluator.

It has also been found that two new Self-Help Groups were constituted recently in Panauta Watershed. One Mahila SHG and another Purush SHG, having 10 members in each group. Mahila SHG, as name indicates, all the members of this group were women and contributing Rs.40/- per month at the initial state but now every member is contributing Rs.50/- per month. The total contribution of this group was found Rs.6880/-. Most of the member of this group are expert in knitting work. No loan has been taken by this group from revolving fund so far but they are planning to get a loan from revolving fund for the purchase of knitting machine. Purush SHG have received a loan of Rs.10,000/- from revolving fund and contributing Rs.100 every month. This group having Rs.22,000/- as their own contribution and having Rs.10,000/- sanctioned as a loan from revolving fund. This group is planning to start dairy farming.

Eight Self-Help Groups had received loan from revolving fund out of 20 SHGs. The total amount of loan which has been sanctioned from the revolving fund, was Rs.90,000/- as on 31.5.2002 (see Table-8). Seven SHGs were given loan from revolving fund, as seed money, for vocational development and was found Rs.10,000/- to each SHG, as per Government norms. Mr. J.P. Srivastava, BSA, informed us that all the precautions have been taken at the time of selection of SHGs, for the loaning from revolving fund and arrangements were made to recover the seed money from the SHGs – Members in a maximum of 6 instalments on monthly basis, so this amount could be reinvested in the same or other SHGs. But one SHG namely – Khan Hatkargha SHG of Saura Watershed has been given Rs.20,000/- as loan from revolving fund, which is found just double amount of the prescribed norms (see Table-8).

The records related to the functioning of SHGs, i.e. meeting registers, pass books and productive economic activities has been checked by evaluator at the time of field survey. It has been found that two Self-Help Groups started economic activities after obtaining loan from revolving fund. One was Khan Hathkargha SHG at Saura Watershed and second Prajapati SHG at Birahru I watershed. The President, Mr. Nanhe and Secretary Mr. Nawab, of Khan SHG, showed their plan and place for the Hath Kharga work (Photoplate 5). This group has also purchased the wooden frame and raw material for the Dari making work by the money they got as loan from revolving fund (Photoplate 5). The President of Prajapati SHG at Birahru Watershed also demonstrated his workmanship of making earthen pot on collective basis, after getting loan from revolving fund (Photoplate 6).

It has been found that all the members of User Groups and Self-Help Groups were trained in maintenance of soil and water conservation work. They have also taken part in the executed work of the project at the field level by performing physical labour or by arranging labour for measurement work. On the other hand, only 20 Self-Help Groups have been constituted upto 31<sup>st</sup> May 2002 in all the Watersheds of Sainya Block of District Agra and was not sufficient in number. About 50 per cent of villagers, i.e. who are directly or indirectly dependent on the watershed, should generally be enrolled as members of at least one Self-Help Group. Therefore, PIA and WDT should focus and emphasize to constitute required number of SHGs in the Watershed area of the district. It has also been found that records of SHGs were not properly maintained. The record, i.e. meeting register, Bank Pass Books, personal pass book of individual member and proceedings of the meeting etc. of all SHGs should be checked from time to time by WDT and must be completed.





Plate:5 President Nanhe & Secty. Nawab of Khan SHG showing the place they were installing their Dari making frame and also showing the Pass Books & other records of SHG.

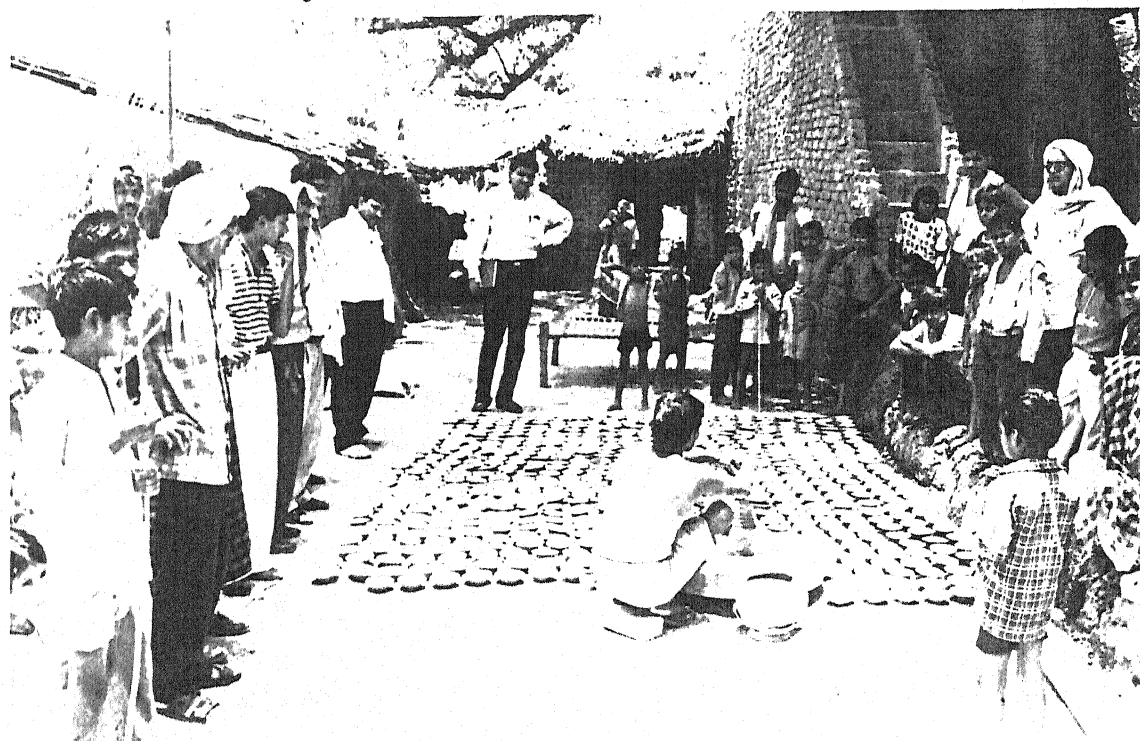


Plate:6 President of Prajapati SHG demonstrating Kumhar workmanship at village Birahru to evaluator Dr. R.C. Tyagi.

## 12. ROLE OF WOMEN IN THE PROJECT

It has been found that the role of women in execution of the project was not highly significant in District Agra. Because of some social problems, those are prevailing in the rural part of the district, women could not acquired any significant position and are not playing their required role in this project.. Although a significant proportion of women have acquired a position in their household in which their opinions are also sought in family matters. However, it finds that outside their house they have to observe social customs of the village society and therefore, most of the women with whom evaluator met at the time of field survey, in connection to collect information specially from female Self-Help Groups, they were responding behind the *Purdah* and reported that they remain in *Purdah* (Photoplate 7).

Despite above social problem among females, Project Implementation Agency (PIA), with the help of Watershed Development Team have made their efforts to make the active and positive involvement of women in the execution of project work. They have prepared 49 women to form 4 Female Self-Help Groups in four Watersheds. 12 women were also found as the member of other two mixed (male and female) SHGs. Apart from the involvement of females in different groups of SHGs, 5 well educated females were also found as the President of five Watershed Development Team (WDT), 6 women working as President of Watershed Association and other 2 were working in the capacity of Chairman of Watershed Committee. All these women are performing well in execution of their job in the project.



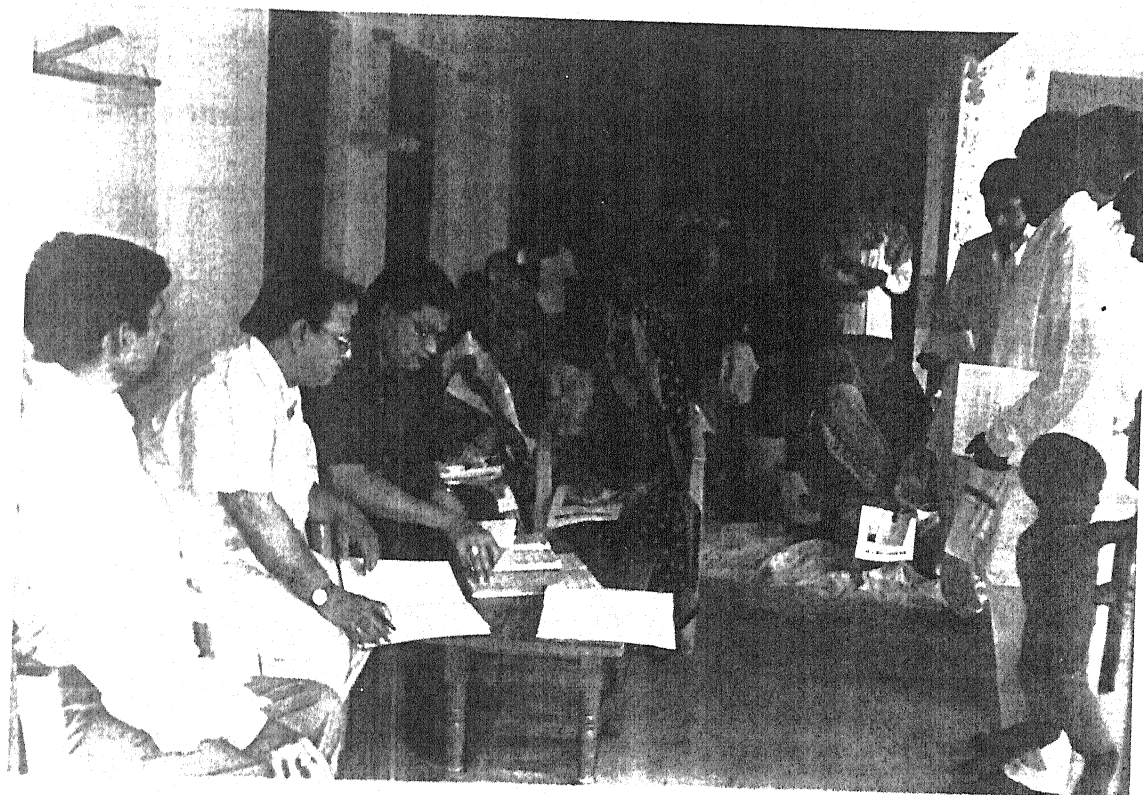


Plate:7 President, Secretary and other female members of Mahila SHG showing their records to evaluator at Panauta village.

In few villages of Sainya Block, Village Pradhans were females and were taking active part and interest, as a public representative, in the project work. Although, few new female groups reported to be constitute shortly (after 3.15.2002) under the supervision of BSA, Ram Ganga Command, Agra, but more emphasis is required by the PIA specially Watershed Development Team (WDT) has to make sure that the positive and active involvement of women in the execution of project work is upto mark. It has also been observed that no special efforts have been made at DRDA level, in this direction so far. No female worker or labour was found in the execution of project at field level, i.e., in construction of Check Dams, Peripheral Bunds/Marginal Bunds, etc.

### **13. THE DETAILS OF COMMUNITY ORGANIZATION WORK**

It has been drawn from the information, provided by the PIA, that in three Watersheds, Village Approach Road (Kutchra), of a total 3798n metres of length, 3 ponds and 11 hand pumps in different villages of Sainya Block have been installed and constructed upto May 31, 2002. At the time of field survey, it has been found, that the work of community organization, was in progress. The total sanctioned amount for the completion of community organization work, was Rs.13.740 lakhs and an amount of Rs.9.609 lakhs has been spent upto May 31, 2002. The remaining amount in the community organization fund was found Rs.4.131 lakh. Three approach roads (kutchra), three ponds, two hand pumps and digging (boring work) for hand pump was examined by us, which was executed by PIA in different villages of Sainya Block.

One hand pump costing Rs.17,120, out of which villagers contributed an amount of Rs.3,198 for the installation of the pump in the village Siyarmau from the community development fund (Photoplate 8). Another hand pump which has also been installed from CD Fund, was found well in working condition at the village Tehra-I. An amount of Rs.16,028 were spent on installation, out of which Rs.1450 were contributed by the local people or users (Photoplate 9). A pond in village Birahura was constructed with a cost of Rs.1,44,500/-. It covers an area of 1 hectare and suppose to be one of the largest pond in the area, which was constructed on the community land (Photoplate 10). A pond in village Sikanderpur was also built for the irrigation purposes, consisting Rs.58,986/- and has been performed from the work fund (Photoplate 11). Third pond, which was checked by evaluator, constructed in the village Tehru I and was also built from the work fund (Photoplate 12).

In three villages, Check or Approach Road has been constructed and has been checked by evaluator. One check road in Birahru village, one in Sikanderpur and another in Lahchuva village were constructed by PIA of Agra district. All these roads were kutchha road and constructed from work fund and community development fund. The length of the road of Birahru village was 266 metres and amount spent on it, was Rs.22,736 from the work fund (photoplate 13). The length of Sikanderpur road was 169 metres and amount spent from the work fund was Rs.9,802 (photoplate 14). One check road (kutchha) of 197 metres has been constructed in Lehchuva village with an amount of Rs.13,804 from community development fund (Photoplate 15).



Plate:8 A handpump installed in Siyarmau Village from C.D. Fund.

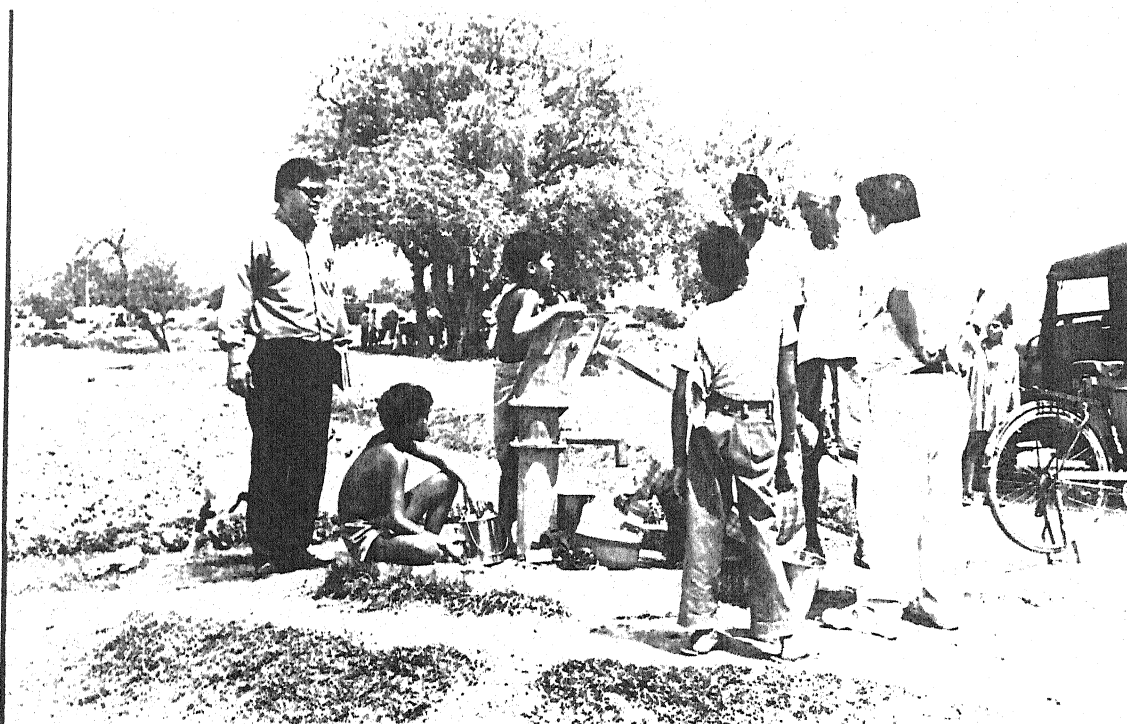


Plate:9 A handpump installed in Tehra Village, watershed Tehra-I from C.D. Fund.



Plate:10 A pond of Birahru village was constructed from work fund.



Plate:11 A pond of Sikanderpur village was constructed from work fund.



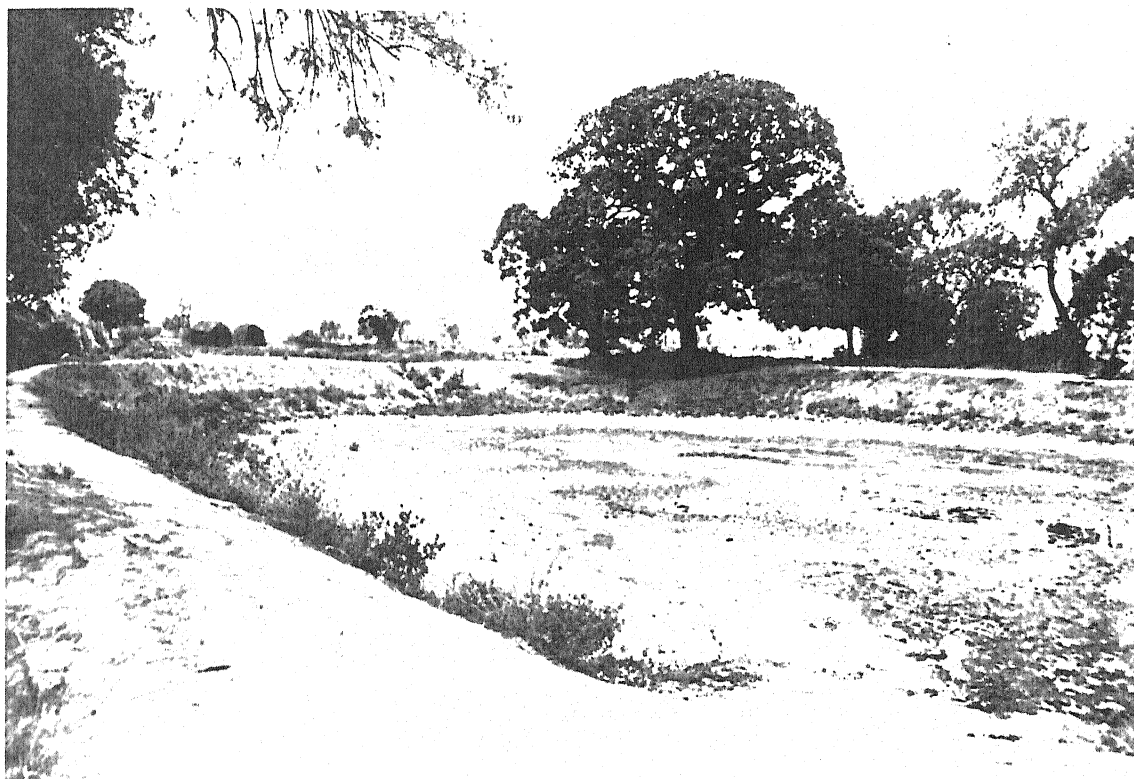


Plate:12 A pond of Tehra village, watershed Tehra-I was constructed from work fund.



Plate:13 A check road (kutcha) of Birahru village, watershed Birharu-II was constructed from work fund.



Plate:14 Kutcha approach road of Sikanderpur village constructed from work fund.



Plate:15 A check road (Kutcha) of Lahchura village.

*GIDS, Lucknow*

The performance of the community organization work by Project Implementation Agency (PIA) and Watershed Development Team (WDT) has been found satisfactory in district Agra-II. The village community is also taking interest and active part in the decision making process as well as in the execution of project work. At the same time it is advisable, to make clearly sighted, there must be some painting work or holding at the place where work (hand pumps, ponds and check road) has been performed by PIA, mentioning the name of the project and name of performing agency, which has not been found at the time of field survey. In this way it can be distinguished easily and clearly, that the work is completed by PIA, as other agencies are also performing the same type of work (like installation of hand pumps) in the same area from different funds.

#### **14. TRAINING, EXTENSION AND PUBLICITY**

The total number of beneficiaries of all kind of training programmes were 6911. The document regarding the training programmes, which have been provided by the BSA, Ram Ganga Command, Agra shows that the total available amount for the training was Rs.10.992 lakh and Rs.4.553 lakh were spent on the different kinds of training programmes in the district. It has been found that a balance of Rs.6.439 lakh were still lying unused under the budget of training programme. It has been found that all the training programmes, i.e. vocational, technical, formation of self-help groups, etc. were conducted by a training support organization, namely, Regional Rural Development



Institute, at Bichpuri, Agra. It has been informed by BSA, Ram Ganga Command, that these trainings were conducted at training centres as well as village level under his supervision. All expenditures on the training programmes were made by the training Institute from the training fund, which was allotted by the PIA and all cheques were counter signed by the BSA, Ram Ganga Command, Agra, after carefully examining the support papers of spent money. It has been observed that the budget allotted for the training programmes was sufficient and less than a half has been utilized for the purpose so far. However, it has been informed by BSA, that PIA is going to conduct few more training programmes shortly, which would be given by the experts of the Regional Rural Development Institute, Bichpuri, to the members of some Self-Help Groups, those were interested in Dairy work, Dari Making work and improved earthen pot making work, etc..

As far as publicity and extension work is concerned, it has found that the attention paid by PIA, on this work, was not sufficient. A little work has been performed so far in this direction. It is advisable that banners, holdings, boards and paintings of slogans - showing details of the project programmes and benefits of it, should be placed in the concerning watersheds and villages at the right places. It develops a good atmosphere for the Watershed Development Project in the area. The publicity work has been checked by the evaluator (Photoplates 16 & 17).

#### **15. NURSERY AND PLANTATION WORK**

Different kinds of fruit bearing plants and nursery, i.e., Mango, Guava, Lemon, Karaunda, Kathal, Jamun, Anwla, Shahtoot, Anar and Ber were planted in 17 watershed

areas of district Agra. At total amount of Rs.1.082 lakh has been spent on nursery and plantation work upto May 31<sup>st</sup>, 2002. A total 9857 nursery and plants have been planted so far. Out of total plantation work, 3702 were mango plants, 1910 guava, 1570 lemon, 1188 Karaunda, 808 katahal, 25 Jamun, 190 Anwla, 30 Shahtoot, 4 Anar and 430 were Ber (Table 9). Mr. J.P. Srivastava, BSA, Ram Ganga Command, Agra informed us that all the nursery plants were arranged by PIA and distributed through Project Inspectors to the farmers, in all the 17 Watersheds on first come first serve basis.

Nursery plantation work of village Birahru was checked by evaluator and was found, not upto appreciable mark. Lemon plants were planted at Birahru village on private land (farm) and most of the plants were not in good growing condition, those were supplied by PIA to the landlord. Although, other lemon plants, those were planted by the farm of the same farm were growing well (Photoplate 18). It has been reported that the survival rate of the total plants was only 20 to 30 per cent, depending upon the care taken by the owner of the farm. This may be causing because of the two reasons. One, nursery provided by the PIA to the farmers were not of good quality and second, farmers were not taking care of these nursery after plantation, which they got free of cost. At the time of distribution of plants and nursery precautions should be taken by PIA in the fashion that nursery should be of good quality and can be provided to the farmers those can really take care of them after plantation. Also a model can be developed on the community land.

Table 9 : Progress of Plantation Under Integrated Wasteland Development Project

(Upto May 31, 2002)

Sl, No.	Name of Watershed	Details of Fruit Bearing Trees (in Number)										Total
		Mango	Guava	Lemon	Karaunda	Katahal	Jamun	Anwla	Sahtoot	Anar	Ber	
01	Siyarmau	500	450	--	100	20	--	--	--	--	--	1070
02	Sikanderpur	200	100	300	100	30	--	--	--	--	--	730
03	Tehra II	300	--	--	10	25	--	--	--	--	--	335
04	Jaunai	250	300	200	20	100	--	50	20	4	--	944
05	Kukawar	400	300	50	50	200	--	20	10	--	--	1030
06	Lahchura	100	50	50	50	80	--	25	--	--	--	355
07	Saura	400	50	100	50	--	--	20	--	--	200	820
08	Besehra II	25	50	100	100	--	--	50	--	--	100	425
09	Brahru I	10	60	75	85	--	--	--	--	--	130	360
10	Murkiya	350	150	180	150	--	--	--	--	--	--	830
11	Tehra I	150	10	30	--	60	--	--	--	--	--	250
12	Nagla Enami	100	40	50	50	40	--	25	--	--	--	305
13	Birharu I	303	3	11	30	61	--	--	--	--	--	408
14	Birharu II	146	32	74	136	75	--	--	--	--	--	463
15	Taharpur	30	175	30	10	35	15	--	--	--	--	295
16	Chhitpura I	243	60	150	87	32	10	--	--	--	--	582
17	Chhitpura II	195	80	170	160	50	--	--	--	--	--	655
	<b>TOTAL</b>	3702	1910	1570	1188	808	25	190	30	4	430	9857



Plate:16 Publicity work in Siyarmau village, Sainya block, Agra.



Plate:17 Publicity work in Kukwar village, Sainya block, Distt. Agra.



Plate:18 Nursery work showed by Mr. J.P. Srivastava, BSA to Dr. R.C. Tyagi in village Birahru, Distt. Agra.

## 16. SUSTAINABLE DEVELOPMENT OF THE AREA AND PERFORMANCE OF PIA

An intensive field survey has been made to examine the sustainable development of the project area and overall performance of the Project Implementation Agencies (PIA), which were shown by them on document. All the records and maps relating to the Integrated Wasteland Development Project, were checked carefully on the spot. It has been found that the ravines and slopes were not very steep and deep in any village of Sainya block of Agra District. The rolling and undulating topography with slopes resulted in erosion and siltation in reservoirs. The check dams (CD), peripheral bunds/lateral bunds and marginal bunds were constructed to resolve this problem. Few check dams (CD) of village Siyarmau were checked by the evaluator. A check dam (with outlet) of 49 metres in Murkiya village was constructed from work fund and Rs.15,660/- were spent on it (Photoplates-19). Another CD of 35 metres in length was constructed in Rs.6,670/- in the same village (Photoplate 20). Two check dams of Siyarmau village were also visited by the evaluator (Photoplates 21&22).

Peripheral bunds and Lateral bunds were also constructed and found in good condition at the time of field survey. Two Peripheral Bunds of Sikanderpur village and one Peripheral Bund at Lahchura and one PB/Lateral Bund of Birahru village were also visited and examined by evaluator (Photoplates 23, 24, 25 & 26). Most of the farmers in these villages, to whom we met, informed us that due to the formation of check dams, peripheral/marginal bunds and lateral bunds, the soil and water erosion has been checked upto a certain level and agricultural production also increased in the project area. The work performed by Project Implementation Agency was found satisfactory.





Plate:19 C.D. and its outlet were constructed from work fund in village Murkiya of Distt. Agra.



Plate:20 C.D. of village Murkiya, block Sainya, Distt. Agra.



Plate:21 C.D. of village Siyarmau of Distt. Agra.

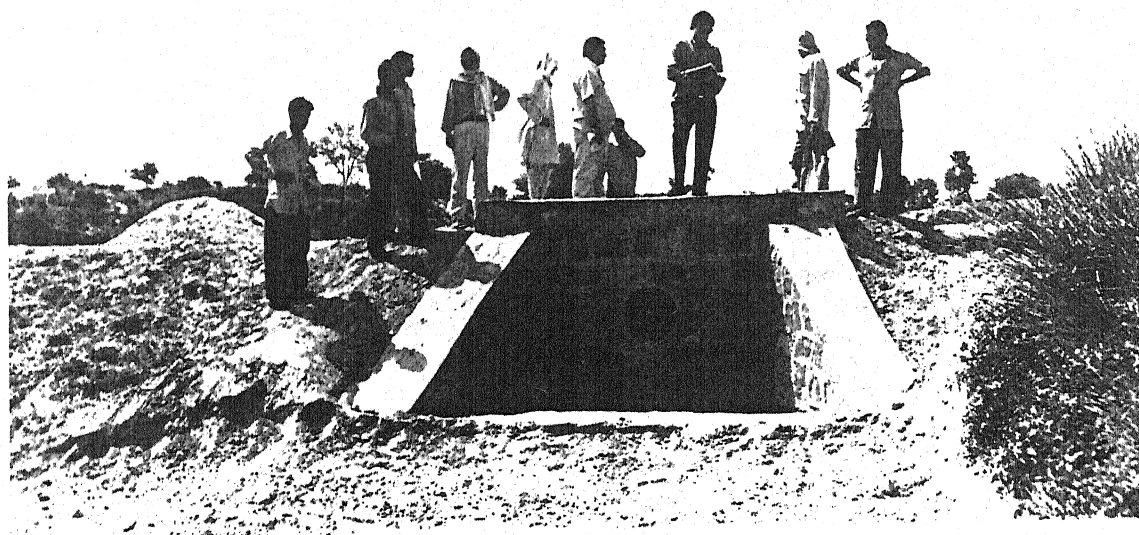


Plate:22 Pucca drop inlet on a C.D. of Siyarmau village of Distt. Agra.

*GIDS, Lucknow*





Plate:23 P.B. of village Sikanderpur of Distt. Agra.

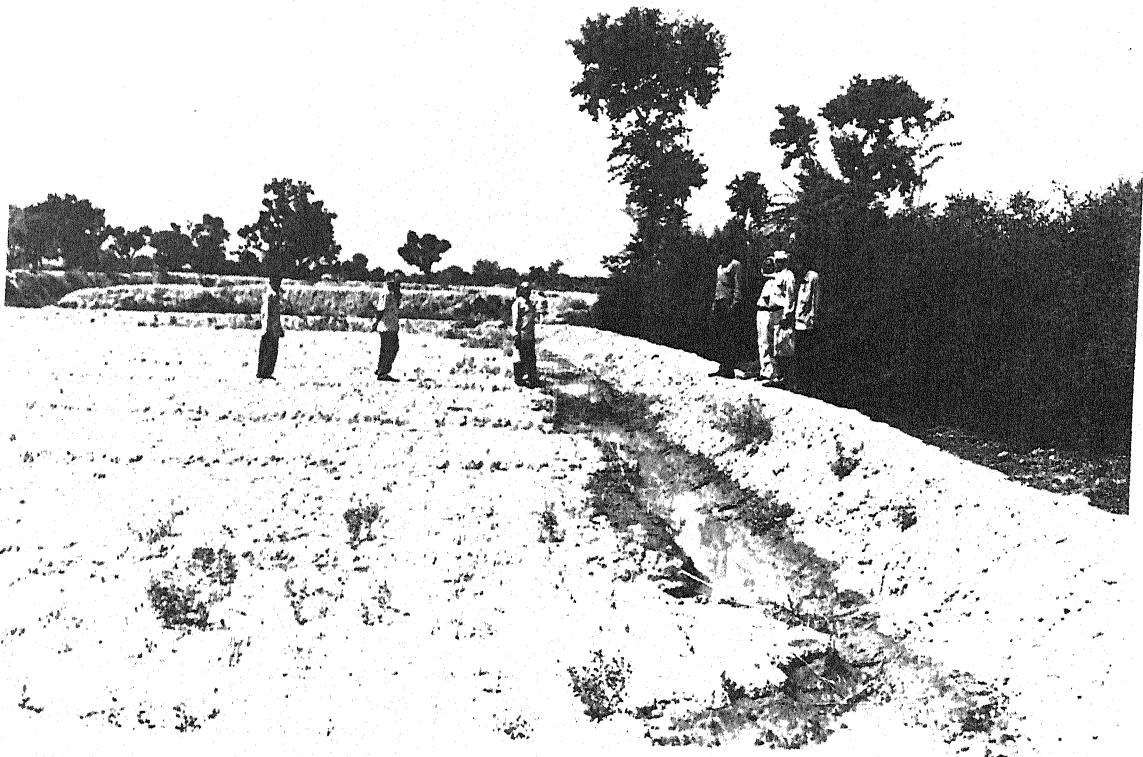


Plate:24 P.B. of village Sikanderpur of Distt. Agra.

*GIDS, Lucknow*



Plate:25 P.B. of Lehchura village in Agra.

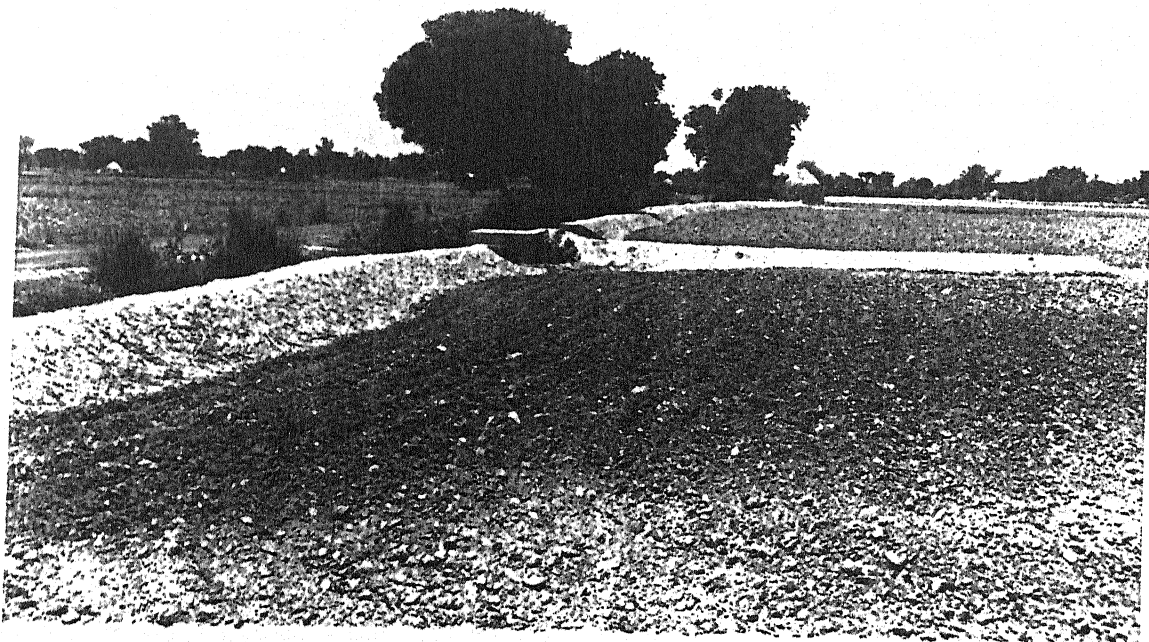


Plate:26 Peripheral and Lateral Bund of village Birahru of Agra District.

*GIDS, Lucknow*

## 17. PHYSICAL AND FINANCIAL ACHIEVEMENTS

Under the Integrated Wasteland Development Project, the entire physical targeted area, which has to be treated during the period of 4 years, i.e. 1999-2000 to 2003-2004 is 6870 hectares and total approved amount for the treatment of this area is Rs.274.80 lakh. Rs.123.66 lakh has been sanctioned by the Ministry of Rural Areas and Employment, Department of Wasteland Development, New Delhi and given to PIA, through DRDA Agra, for the treatment of 3091.50 hectares out of the total area in the project. Rs.108.155 lakh has been utilized in the execution of work. The balance area, which has to be treated was found 387.63 hectares with a balance of Rs.15.505 lakh.

The construction of seven Contour Bunds (CB) of 856 metres with an amount of Rs.0.206 lakh, 265 peripheral bunds of 79387 metres, with an investment of Rs.33.889 lakh, 39 check roads/bunds of 18933 metres of Rs.13.640 lakh, 107 check dams of 4983 metres, of Rs.15.072 lakh, 17 ponds with an investment of Rs.12.383 lakh, 9857 plantation with an investment of Rs.1.082 lakh and Rs.3.297 lakh has been spent on other works. A total amount of Rs.79.569 lakh has been spent by PIA on these particular works from the work fund. The details regarding the physical and financial targets and achievements upto May 31, 2002 has been given in Table-10.

Table 10 : Achievements of Physical and Financial Targets

(Upto 31.5.2002)

Sl. No.	Name of Village	Target		Achievement		Balance	
		Physical (Ha.)	Financial (Lakh)	Physical (Ha.)	Financial (Lakh)	Physical (Ha.)	Financial (Lakh)
1	Murkiya	273.15	10.926	238.42	9.537	34.73	1.389
2	Bisehra I	171.00	6.840	148.70	5.948	22.30	0.892
3	Bisehra II	171.00	6.840	148.27	5.931	22.73	0.909
4	Jaunai	166.05	6.442	149.43	5.977	16.62	0.665
5	Birahru I	186.75	7.470	156.80	6.272	29.95	1.198
6	Birahru II	186.30	7.452	171.80	6.872	14.50	0.580
7	Sikanderpur	198.00	7.920	175.63	7.025	22.37	0.895
8	Kukawar	171.90	6.876	146.73	5.869	25.17	1.007
9	Siyarmau	264.15	10.566	229.25	9.170	34.90	1.396
10	Lahechura	81.00	3.240	69.08	2.763	11.92	0.477
11	Nagla Enami	72.45	2.989	62.82	2.513	9.63	0.385
12	Saura	295.20	11.808	217.17	8.687	78.03	3.121
13	Tehra I	196.20	7.848	278.82	7.153	17.38	0.695
14	Tehra II	177.30	7.092	158.50	6.340	18.80	0.752
15	Taharpur	55.35	2.214	48.00	1.920	7.35	0.294
16	Panauta	37.80	1.512	31.58	1.263	6.22	0.249
17	Basai Kalan	63.90	2.556	55.30	2.212	8.60	0.344
18	Chhitpura I	185.85	7.434	157.05	6.282	28.80	1.152
19	Chhitpura II	183.15	7.326	160.52	6.421	22.63	0.905
	<b>TOTAL</b>	<b>3091.50</b>	<b>123.660</b>	<b>2703.87</b>	<b>108.155</b>	<b>387.63</b>	<b>15.505</b>

Source : BSA Office, Agra-II

### 18. UTILIZATION OF FUND AND MAINTENANCE OF RECORDS

A total fund of Rs.123.66 lakh had been received by PIA, through DRDA upto May 31, 2002 in first phase of the project under the heads of work component, training programme, administrative head and community development work. Table 11 shows, work-wise distribution of the fund, expenditure made so far and a balance of amount upto May 31, 2002.

Table-11 : Total Amount Received and Total Expenditure Made on Integrated Wasteland Development Project, District Agra-II

(Upto May 31, 2002)

Sl.No.	Items	Amount Received (Rs. in lakhs)	Expenditure (Rs. in lakhs)	Remaining Amount (Rs. in lakhs)
1.	Work component	82.440	79.569	2.871
2.	Community Development	13.740	9.609	4.131
3.	Training Programmes	10.992	4.553	6.439
4.	Administrative Expenses	16.488	14.424	2.064
	<b>Total</b>	<b>123.660</b>	<b>108.155</b>	<b>15.505</b>

Source : Information provided by BSA Office, District Agra-II

It has been found that all the funds, which were sanctioned for the execution of project work, were properly utilized and the financial records of the accounts were found well maintained. The details of expenditure of items like work component, training programmes and community development work has also been provided to us, which has been described above in the report. Only the details of administrative expenses were not provided.



## 19. OVERALL IMPACT ASSESSMENT AND RECOMMENDATIONS

Contour Bunds (CB), Peripheral Bunds (PB), Check Roads/Bunds, Check Dams, Ponds and Plantation work have been performed by PIA, according to the approved work plan in the district Agra. 17 ponds have been constructed in the different watersheds and in well-planned way. It is very fruitful for the project area in order to hold water in these ponds. Water may be fetch for the agricultural purposes as well as for animals and is a big source to improve water table of the area. At the time of field survey, it has been found that the condition of agricultural land of the project area was improved due to the executed work. Soil and water erosion has been checked upto a certain level. Farmers of the project area have started ploughing on their farms, those were not in use and lying barren a few years ago. It has also came to know that water level of the area has been improved. As it is a mid-term evaluation of the project, it is not possible to measure the exact amount of increase in agricultural production in IWDP area. Also a separate and deep Impact Assessment Study of this project area is required to know that how much agricultural production increased and how much water table increased in Agra-II. The overall performance of DRDA, PIA and WDT in Agra-II is found satisfactory.

This evaluation study recommends few suggestions for the performance of DRDS, PIA and WDT in second phase of the project, which should be taken care of:

- (1) Contour bunds, Peripheral Bunds, Check Dams are required sodding on them.

- (2) Contour ploughing is essential and required in project area to minimize soil and water erosion. PIA should promote contour ploughing by taking help from local farmers.
- (3) Tree plantation is necessary on the boundary area of the ponds and should be planted.
- (4) Few more approach roads are required in the area for the development, particularly kharanja road, which has not found in any village of project area and should be constructed by PIA.
- (5) The survival rate of plantation was found 20 to 30 per cent, which was on very low side. This work may be performed on community land with the help of local farmers and landless labours.
- (6) PIA and WDT should emphasize to constitute more SHGs in watershed villages and their records must be examined at least twice in a month.
- (7) The role of women in the execution of this project work require more attention by DRDA and PIA as it is not upto the mark.
- (8) Banners, holdings, boards, and painting of slogans - showing details of the project programmes and benefits of it, should be placed in the villages at right places. It develops a good atmosphere for the IWD project in the area.
- (9) Care should be taken by PIA at the time of distribution of plants to the farmers for the plantation and should be given to those farmers they can really take care of them after plantation. A model may be developed on community land with the help of landless labourers.



- (10) It has been observed that the first instalment of Rs.41,22,000/- (Rupees Forty-one Lakh Twenty Two Thousand only) was released to DRDA by the Ministry of Rural Development, Department of Land Resources, New Delhi on December 31, 1999 but same had been released to PIA after a gap of 3 months, i.e. on March 31, 2000. It also happened with second and third instalments. It is advisable that this type of delay should be avoided, so that project work may start without any delay.